Health Policy Challenge for Breast Cancer Prevention: A Case Report

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Abstract

Breast cancer early diagnosis increases treatment chances, and self-examination is one of the most common screening methods employed by women. The case of a 24-year-old Iranian woman with a history of mild mental retardation and chest pain was reported. A large lump was detected in the breast during visitation to the surgical clinic. The parents stated the lump was noticed due to a shape change in the clothes covering the patient’s chest area. Therefore, the patient had mastectomy surgery after a biopsy and a malignant breast lump was confirmed. The registration and identification of people with mental disorder histories or various mental retardation degrees in each region’s health centers to periodically assess their breast health tend to reduce the risk of late breast cancer detection in women.

INTRODUCTION

In recent decades, some success has been achieved regarding the control and prevention of infectious diseases. Nonetheless, the incidence and prevalence of non-infectious diseases have increased significantly (Gutiérrez et al., 2019). Cancer is regarded to be the third main cause of death after cardiovascular diseases and accidents (Emily et al., 2021). Meanwhile, the prevalence of breast cancer accounts for about one-third of all women’s cancers. Moreover, it is the second most common cancer after lung cancer and the most common cause of cancer mortality among women (Malvia et al., 2017). The most common cancer in Iranian women is the breast cancer about 41,000 patients. Furthermore, more than 7,000 patients are added to this number each year (Soroush et al., 2016).

Early-onset of the disease greatly affects its recovery rate. There are several ways to diagnose breast cancer early. Being aware of the early symptoms of the disease, being familiar with breast self-examination, and undergoing mammography can reduce the mortality rate of about 23-30% in the case of the women who are over 50. Breast self-examination is a simple, effective, and inexpensive way to diagnose breast cancer early and can be performed by most of the women (Takkar et al., 2017). Based on the studies, 95% of advanced breast cancers and 65% of
primary breast cancers are detected by women themselves. Consequently, taking fast action to screen the breasts is important regarding the early diagnosis and treatment of this disease. Studies have shown that breast self-examination reduces the risk of breast cancer by one-third in the cases in which the axillary lymph nodes are involved in the disease (Ahmed et al., 2018). Various studies in Iran have indicated that women visit doctors late before the diagnosis and treatment of cancer. This issue reduces their chances of survival. Based on the aforementioned studies, about 3.7% of women undergo (Monfared et al., 2017). In western countries, the mortality rate of this disease has been greatly reduced due to the use of these methods by the majority of women (Kalligudi et al., 2019).

Biologically, the risk of various cancers is higher in people with mental disabilities. The term “mental disability” refers to the condition of the individuals who experience severe limitations regarding both cognitive functions and adaptive behaviors (i.e., conceptual, social, and practical adaptive skills) before the age of 18. It is clear that the term “mental disability” is synonymous with the term “mental retardation” (Mazon et al., 2019). The degree of these people’s disabilities depends on their skill level, intelligence level, and social support. The life expectancy of people with mental retardation has increased as a result of the advancements in medical care. Moreover, these individuals live in community-based environments instead of institutions. Adults with mental retardation prefer to be treated by doctors who treat their healthy peers (Bauer et al., 2019). Notwithstanding, there are limited guidelines on these people’s screening, especially regarding cardiovascular diseases and cancers (Mazon et al., 2019). The mentally retarded people are less likely to have children and breastfeed them in comparison with the other women. The lack of clear guidelines and the scarcity of breast cancer screening recommendations increase the risk of developing breast cancer at more advanced stages in the case of mentally retarded people (Nambi & Bhatt, 2017). In this study, we reported the case of a woman with mild degrees of retardation who visited the doctor after the extensive growth of a large cancerous tumor in her breast due to the undefined screening system.

CASE REPORT
The patient was a 24-year-old woman who visited the surgical clinic. During the examination, the doctor noticed the growth of a very large tumor in the patient’s right breast (Figure 1). The patient’s family stated that, although their daughter suffered from mild mental retardation, she did not need the provision of personal care services by the others and did not mention the existence of a lump in her breast. Moreover, as they noted, they noticed the lump accidentally due to a change in the appearance of her chest area and the shape of her clothes which covered her chest. Finally, they explained that periodic examinations were not performed by the family or the health centers to detect the existence of a tumor in their daughter’s breast. The patient underwent a mastectomy after chemotherapy.

DISCUSSION
In the field of medicine, prevention includes all of the measures which are taken to: prevent the occurrence, cease, or slow down the course of the disease (Martins et al., 2018). According to this definition, prevention takes place at four levels including primordial prevention, primary prevention, secondary prevention, and tertiary prevention (Ali & Katz, 2015). It is logical to highlight the necessity of paying attention to all of the levels of prevention. Nonetheless, prevention at the first level precludes the occurrence of the disease. This issue relieves the patients’ physical and mental distress, reduces the waste of time, and prevents the costs of the disease. Moreover, it offers thousands of other benefits (Chomistek et al., 2015; McDaid et al., 2017). The first level of prevention mainly refers to the necessary identification and screening of patients from all walks of life, especially vulnerable groups such as children, pregnant mothers, and the elderly (Al-Rifai & Loney, 2017). Notwithstanding, certain groups in the society have not been mentioned in this level despite their numerous disabilities. Moreover, specific plans have not been developed to screen these groups of people and to provide them with comprehensive health education. The mentally disabled and mentally retarded individuals are among the aforementioned groups of people.

The reported case had not received the necessary breast self-examination education and did not have any information on the other diseases. Breast self-examination is one of the primary methods of preventing breast cancer. The individual herself is responsible for it and uses it to detect breast cancer (Ahmed et al., 2018). Women examine their breasts for lesions and bulges (Hazarka et al., 2017). Despite the growth of the lump in her breast, the patient had not realized that it was pathological and had not informed her family about it due to some reasons such as
mental retardation. The patient's parents noticed the tumor when it was very large and could be detected beneath the patient's clothes. These patients may refrain from informing their families of their breast lump owing to some reasons which can be examined in various social fields, the psychology of the mentally disabled people field, and cultural fields. They might include reasons such as fear of family, embarrassment, stress, fear of being excluded from the other individuals, and lack of awareness among others (Biabani et al., 2019; Dekker et al., 2015; Hernández-Saca et al., 2018). However, the lack of provision of specific screening education for mentally disabled patients and their families is the most important reason among the aforementioned reasons. Regarding the reported case, the patient and her family had not received any relevant education and the patient underwent the treatment when the lump had grown to almost 20 centimeters.

It should be mentioned that the reported case is only an instance of the lack of attention to these patients' breast cancer screening. We appreciated the significance of this issue when we searched reputable databases such as PubMed, Embase, Google Scholar, DOAJ, Medline, Web of Science, Psych Info, and CINAHL and realized that specific screening plans had not been fully developed for these patients. Nonetheless, effective steps have been taken regarding the first, the second, and the third prevention levels (Dalton-Locke et al., 2020). Patients with mental retardation, mental disability, and Down syndrome have significantly lower intelligence levels (70 and less than 70) in comparison with the average intelligence level (100-84) of the other people in the society (Spiridigliozzi et al., 2017). It is necessary to develop programs for these patients or their families based on the conditions of the disease, the degree of the patients' disability, and the families' abilities. We propose a plan to periodically screen these patients by identifying patients with mental retardation at various levels with the help of the regional health networks. Also, the need for more preventive expertise at the community-level shows that this kind of expertise is dedicated to educating the mentally disabled individuals and their families. Therefore, it is recommended that a program be developed to screen these patients in future studies.

**CONCLUSION**

The registration and identification of people with a history of mental disorders or various
degrees of mental retardation in health centers in each region to periodically assess their breast health can reduce the risk of the late detection of breast cancer in women. It is suggested that the legal aspects of supporting these patients be addressed in future studies.

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